

Appl. No. 10/660,280  
Amdt. dated April 29, 2004  
Reply to Office Action of February 25, 2004

**Amendment to the Specification:**

***Please remove paragraph heading [006] page 1:***

**[006] ORIGIN OF THE NEW VARIETY:**

The present invention relates to a new and distinct variety of South American  
5 Argentine ornamental mesquite known botanically as ~~Prosopis Alba~~ Prosopis Alba. The  
new variety will be name 'Cooper.' COOPER AMAZON is a Trade Mark applied to the  
variety to indicate the source of origin thereof.

***Please add new paragraph heading [0011]:***

**BACKGROUND OF THE INVENTION:**

10 ***Please amend paragraph [0018] Page 1:***

In 1992, at Cooper's Wholesale Nursery in Pima, Arizona, asexual reproduction  
of the new variety 'Cooper' began when I took 200 cuttings from Prosopis Alba mother  
tree #1, of which 6 rooted and grew. These 6 trees were planted in containers. Two  
years later in 1994, I took 100 cuttings from the best tree of the 6 trees that rooted and  
15 grew from the cuttings of 1992. From those cuttings, 5 rooted and grew. They were put  
in containers for further growth.

***Please amend paragraphs [0017 & 0020] Page 2:***

The growth habit of the budded root stock was observed to be exceptionally  
vigorous, typically reaching a height of 10 cm in one week from the pop of the bud.

20 After two weeks, an average of 20 to 25 cm of growth was recorded. This rapid growth

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habit continues until a height of about 102 cm is reached at which time branching begins to occur. The diameter of the trunk of the budded root stock trees was observed to increase at approximately the same rate as the increase in height. As a result, none of the young *Prosopis Alba Cooper 'Cooper'* mesquite trees required staking. All of the 5 245 trees exhibited the same characteristics as the mother tree #1, including the lack of thorns.

In 2001, 500 trees were budded using the five *Prosopis Alba* clones plus one tree from each of the five groups of budded root stock. The growth habit for the 500 trees was the same as that exhibited by the group of 245 trees grown in year 2000. All 10 of the aforementioned asexual propagation activity occurred at our nursery in Pima, Arizona. Due to the rapid growth of the young trees, none of the *Prosopis Alba Cooper 'Cooper'* mesquite required staking. All of the trees were thornless. This characteristic is in marked contrast to the common *Prosopis Alba* which has thorns up to 8 cm in length.

15 ***Please amend paragraphs [009 & 17] Page 3:***

The tree of this new variety is unusual for the species in that it possess a rapid growth rate and matures to larger stature tree than any known thornless *Prosopis Alba Argentine* mesquite. Further, this new variety is thornless with no occurrence of thorns taking place over a period of sixteen years encompassing multiple generations of the 20 *Prosopis Alba Cooper 'Cooper'* mesquite.

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The new variety is hardy having experienced lengthy and hard freezes. Weather patterns having high winds including a tornado resulted only in a stripping of the leaves. No damage to the branches or trunk was noted. The *Prosopis Alba Cooper 'Cooper'* has demonstrated exceptional strength in a wide range of adverse weather conditions.

5 *Please amend paragraph [009] Page 4:*

The following is a detailed description of my new variety of *Prosopis Alba* named *Cooper 'Cooper'*. All color designations herein are made in accordance with the color chart of the The Royal Horticultural Society Colour Chart.

10 Tree: At maturity, the tree height is about 8 m with a canopy of 13 m and a trunk diameter of 1.14 m. The *Prosopis Alba Cooper 'Cooper'* mother tree #1 is 15 years old and received drip irrigation for the first three years. Thereafter no irrigation was provided. The lack of water did not alter its growth rate of about 1 m per year.

*Please add paragraphs [0012] Page 4:*

15 The diameter of the main trunk measures approximately 114 cm, with the main crotch exhibiting a 30 degree departure from vertical. The primary or lower branches (approximately 7 cm or larger in diameter) which emanate from the main crotch depart therefrom at between 10 degrees and 30 degrees from vertical. Branches secondary, tertiary and beyond depart from vertical consistently with the primary branches. Overall branching from the tree bottom to the tree top appears to be symmetrical and creates a  
20 full and robust canopy.

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The trunk color of the mature *Prosopis Alba* 'Cooper' mesquite is gray group 201-A (RHC) and measures approximately 114 cm in diameter. The bark has a rough texture, but not loose and shaggy. Branches of 5 cm to 7 cm in diameter are also color gray group 201-A (RHC) and maintain a rough texture while the terminal branches 3 cm or less in diameter become smooth with a polished look and are the color of group grayed-orange 175-A (RHC).

*Please amend paragraph [0016] Page 4:*

Bark: The bark on the trunk of the mature *Prosopis Alba* ~~Cooper~~ 'Cooper' is rough, but not shaggy. The young terminal branches are smooth with a polished look. At about 66 cm from the ground, the fissures on the trunk measure 7 mm wide. At 159 cm, the trunk fissures are 3 mm wide and disappear beyond that height.

The bark color is gray group 201-A for the trunk and branches of at least 5 cm in diameter. The color of smaller diameter terminal branches is greyed-orange group 175-A.

*Please amend paragraph [001] Page 5:*

Thorns: The *Prosopis Alba* ~~Cooper~~ 'Cooper' has been found to be completely thornless from the mother tree #1 through three generations of asexual reproduction by cuttings followed by cloning via budding from the third generation. No thorns appeared at any stage of growth, nor did any develop into maturity.

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***Please add paragraph at [0016] Page 5:***

5                   The appendages on which the bud forms are on average 6cm to 9 cm long and 0.15 cm in diameter with the color group yellow-green 147-D. Buds grow in a spiraling pattern around the pedicel and number approximately from 110 to 160 with an oval shape. When buds are mature they measure about 0.31 cm in length with the color group green 139-C (RHC). When buds open the calyx contains approximately 5 points, measuring about 1/4 cm from base to tip, giving it a star shape and maintaining the color group green 139-C. An average of 10 stamen surround the stigma inside the calyx, measuring about .62 cm in length with the color group yellow-orange 21-

10                   C. I have observed, on an average, that one seed pod per bloom is formed. Most of the pollination of the new variety is dependent on bees and the weather.

15                   The flower is comprised of the 110 to 160 buds. When all buds are open and in full bloom, the flower measures approximately 6 ½ - 7 ½ cm in length and 1 1/4 cm in width showing the color group yellow-orange 21-C (RHC).

***Please amend paragraph [008] Page 6:***

20                   In July of 2003, a hail storm with winds of 60 mph for a period of one hour took place and over 400 trees of this new variety were exposed. No apparent damage was sustained. The height of the trees in containers at that time was 102 to 122 cm. The strength of the Prosopis Alba Cooper 'Cooper' variety under severe weather considerations is notable.